

## **MAGNETO RESISTIVE HEAD AND MAGNETIC RECORDING APPARATUS**

### **ABSTRACT OF THE DISCLOSURE**

A magnetoresistive head comprises a free magnetic layer that has first and second free magnetic films sandwiching a non-magnetic intermediate film therebetween, the respective magnetizing directions of the first and the second free magnetic films are antiparallel. The length of the free magnetic layer in the direction of the track width is 200 nm or less, and a difference between a product of saturation magnetic flux density and a film thickness of the first free magnetic film, and that of the second free magnetic film is within a range from 1 to 3 nmT. By this structure, the variation of output and the variation of asymmetry is greatly decreased at a track width of 200 nm or less.

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